



Part Number: 4694P

12 GHz Coax, 4K UHD Precision Video Coax, RG-6/U Type, 75 Ohm, 18 AWG Solid, CMP

Product Description

12 GHz, 4K UHD Precision Video Coax, 75 Ohm RG6 18 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid, CMP, Flammarrest® jacket

Technical Specifications

Product Overview

Environmental Space:	Indoor (Not Riser or Plenum)
Suitable Applications:	SMPTE 2082-1 12 Gb/s UHD TV, SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080P

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
18	Solid	SPC - Silver Plated Copper	0.04	1

Insulation

Material	Nominal Diameter
FFEP - Foam Fluorinated Ethylene Propylene	0.168 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Bonded Duofoil® (Bonded to Dielectric)	100 %
Braid	2	TC - Tinned Copper		95 %

Outer Jacket Material

Material	Nominal Diameter
LS PVC - Low Smoke Polyvinyl Chloride	0.229 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
6.3 Ohm/1000ft	2.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.1 pF/ft

Inductance

Nominal Inductance
0.103 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.23 dB/100ft
3.58 MHz	0.46 dB/100ft
5 MHz	0.54 dB/100ft
6 MHz	0.58 dB/100ft
7 MHz	0.63 dB/100ft
10 MHz	0.73 dB/100ft
12 MHz	0.80 dB/100ft
25 MHz	1.11 dB/100ft
55 MHz	1.57 dB/100ft
67.5 MHz	1.73 dB/100ft
71.5 MHz	1.77 dB/100ft
88.5 MHz	1.92 dB/100ft
100 MHz	2.07 dB/100ft
135 MHz	2.39 dB/100ft
143 MHz	2.46 dB/100ft
180 MHz	2.76 dB/100ft
270 MHz	3.42 dB/100ft
360 MHz	4.02 dB/100ft
540 MHz	5.08 dB/100ft
720 MHz	6.01 dB/100ft
750 MHz	6.15 dB/100ft
1000 MHz	7.29 dB/100ft
1500 MHz	9.27 dB/100ft
2000 MHz	11.02 dB/100ft
2250 MHz	11.84 dB/100ft
3000 MHz	14.12 dB/100ft
4500 MHz	18.19 dB/100ft
6000 MHz	21.53 dB/100ft
12000 MHz	33.02 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.22 ns/ft	83 %

Voltage

UL Voltage Rating
300 V

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
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Temperature Range

Operating Temp Range:	-20°C To +75°C
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Mechanical Characteristics

Bulk Cable Weight:	41 lbs/1000ft
Max Recommended Pulling Tension:	69 lbs
Min Bend Radius/Minor Axis:	2.3 in

Standards

NEC/(UL) Specification:	CMP
RG Type:	6/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes

EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2017-08-16
CA Prop 65 (CJ for Wire & Cable):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Y
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Part Number

Non-Plenum Number:	4694R
Related Parts:	4694R

Variants

Item #	Color	UPC	Length
4694P 0101000	Black	612825406808	1,000 ft
4694P 0105000	Black	612825406815	5,000 ft
4694P 0061000	Blue, Light	612825406785	1,000 ft
4694P N3U1000	Green, Mil	612825406754	1,000 ft
4694P 0031000	Orange	612825406778	1,000 ft
4694P 0021000	Red	612825406761	1,000 ft
4694P 0071000	Violet	612825406792	1,000 ft

History

Update and Revision:	Revision Number: 0.86 Revision Date: 08-22-2019
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